

Wirginia OMildlife

Dedicated to the Conservation of Virginia's Wildlife and Related Natural Resources and to the Betterment of Outdoor Recreation in Virginia

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COMMONWEALTH OF VIRGINIA

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COVER: The channel catfish is the most popular of his tribe with anglers. Among Virginia's "cats." only the flathead, which is confined to the Mississippi watershed, grows larger than the channel. Our cover was painted from life by artist Duane Raver. The larger fish weighed three pounds, and was marked as shown, although ordinarily a channel cat of this size will have lost most if not all of his spots.

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Why Fight Among Ourselves?

CONGRESSMAN John Dingell of Michigan in a recently published article asked conservationists: "Why Fight Among Yourselves?"

Why inded?

The answer is simple. Conservationists disagree for the same basic reason that Democrats, Republicans, Christians, and even Communists do.

If conservation were a narrow discipline—a science—there might be less controversy within the ranks. But conservation is a broad pattern of assertions, theories and aims that deal with virtually every facet of man's relationship to his natural environment. It deals with values and purposes that are of concern to everyone, and the term "conservationist" is broad enough to embrace all who manifest an active interest—either intellectual or pragmatic—in the land and its resources. Many kinds of people and many diverse groups are conservationists. Their interest in man's relationship to his environment stems from a wide variety of personal experiences and points of view. Naturally, such people do not always agree.

Disagreements and controversies, under the circumstances, are not bad. They need to be aired publicly, not kept under wraps. Without open discussion and debate, without the constant challenge of one opinion against another, the compromises and adjustments needed to achieve unity and concerted action could not be made, and conservation would remain a weak and fragile philosophy subject to fragmentation at the first impact of opposition.

For this reason the pages of Virginia Wildlife are open to its readers as a public forum in which to debate conservation issues. We welcome letters from subscribers, especially those which reflect honest differences of opinion on controversial matters, and will print as many of them as we can. We fear neither honest criticism nor views we cannot endorse. If our own positions are not sufficiently sound to withstand challenge, we deserve to be driven from them. As David Lilienthal once said: "And all of the criticism served to remind us of that truth every public officer might well daily repeat: 'For today I wield some of the power of the state—but I must never for a moment think that I am that power. As a public official I am in the service of the public and to that public I am in everything responsible and accountable.'"

Let's not lock up the forum!-J. F. Mc.

Disagrees

I don't usually write letters to the newspapers and magazines I read, but this time will have to be an exception.

I just read your editorial on "Independence" and I think you state an unfounded assumption as if it were a proven fact when you say, "The farther man gets from the soil the less he seems able to understand the fundamentals of independence either as a philosophy or as a way of life." Wherever do you find justification for that? It sounds to me like a misplaced argument against equalization of rural and urban representation in our legislature, which the courts have recently ordered. Really, what does "contact with the earth" and open spaces have to do with "hardiness and independence?" Are farmers any more independent of the subsidies and controls of a paternalistic government than city dwellers?

To your first questionable premise you add another—that recreation need not consist of "filling idle hours with frivolous activity" but can somehow preserve our independence if used to reestablish a "close and worthwhile contact with the earth." Recreation by its very nature consists mainly of "frivolous activities." It is by hard work rather than by play that our independence was won, and by work it may be preserved.

Concern about the evils and dangers of industry and progress leaves me cold. The capacity of our country to provide a high standard of living for its human population has been improved, not impaired. Talk of a back-to-the-soil movement is little more than an expression of nostalgia for good old days that wouldn't seem so good after all if we had to live through them again. It's a dreamer's wish to escape reality.

"Be fruitful, and multiply, and replenish the earth, and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing. . . ." That is the earthly destiny of the human race. Let's get on with it.

A.O.S.
Richmond

We usually do not print anonymous letters, but we make an exception this time too. It is said that even the Devil can quote Scriptures.—Ed,

WILDLIFE MANAGEMENT ON VIRGINIA

UR concept of wildlife management on military areas has changed a great deal since Camp Lee (now Fort Lee) was made available to the Virginia Commission of Game and Inland Fisheries as an experimental game refuge back in the post-World War I days. This change in concept has been a natural development, paralleling a rather basic change that has taken place in game management philosophy.

At one stage in the development of the art of game management, it was a widely held belief that the way to provide enough game for a growing population of hunters was to mass produce game in captivity, on game farms, and release it on hunting grounds. When game farming and the annual stocking of hunting grounds turned out to be an ineffective, wasteful and futile effort, game managers tried a variation—the game refuge. The idea was somewhat comparable to that of the game farm, in that game was to be given full protection and an opportunity to breed under the best habitat conditions that could be provided, and the annual surplus was to flow out and keep surrounding hunting areas stocked. The only real difference between this early idea of the role of refuges and the concept of the game farm was that on the refuge the game would propagate itself under more natural conditions than in the game farm pen. The similarity in the two ideas was that in both systems game was to be raised in one place to be shot in another.

While we were in the period of reliance upon game farms and refuges, naturally the major role assigned to publicly-owned game lands was to provide the refuges which would keep surrounding areas, that were open to hunting, well stocked with game. And so back in pre-World War II days, when the deactivated Camp Lee reservation was made available to the Virginia Game Commission, it became one of our major experimental refuges, and so it remained until it was needed again by the Army during mobilization for World War II.

While we know now that refuges do have a place in wildlife management (mostly in providing dispersed resting and feeding areas for migratory waterfowl on their wintering ground and in protecting endangered species), we have long since learned that refuges are no more effective than game farms in keeping large hunting areas adequately stocked



Commission photo by Kesteloo Military authorities designate the portions of the reservation that can be used for hunting and fishing.

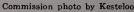
with *upland* game. Both were tried as short cuts to game abundance, and like most short cuts they didn't lead to the objective and we had to back track.

There is no short cut in game management. If we are going to provide wild game for public hunting we have got to do it by producing a harvestable game crop, through habitat manipulation, right on the areas where it is to be harvested. Or, to put it another way, we have to hunt the lands we manage, rather than applying intensive wildlife management in one place and hunting in another. Thus, with our present emphasis on the value of military areas as public hunting grounds, we have turned 180 degrees from the old Camp Lee refuge days, both in basic game management philosophy and in our use of the wildlife resources on these military reservations.

Military installations in Virginia include almost onequarter million acres of land, most of it in the populous eastern section. Twelve of these establishments are now engaged in cooperative wildlife management on about 160,000 acres. These areas also collectively contain 2,300 acres of impounded waters managed for fishing and other water recreation, not to mention the miles of fishable streams found on these installations. Ten of the twelve cooperative

Virginia's military areas are among the state's most productive game areas.

U. S. Marine Corps photo by Kloczkowski









MILITARY AREAS

By CHESTER F. PHELPS
Executive Director



management areas offer big game hunting and eleven offer small game and waterfowl gunning.

Here in brief is how the cooperative wildlife management system works. The military authorities designate what portions of the reservation can be safely and effectively used for hunting and fishing without interfering with their prime military purpose. The Commission posts these areas, helps carry out habitat improvement work, provides planting materials, and provides law enforcement personnel to patrol the area and see that sportsmen abide by state game laws. The military maintains control over the issuance of permits, and usually provides some enforcement personnel to help keep the sportsmen within assigned areas.

Most Virginia military areas are well suited to game management practices. The key to game abundance is creating a variety and dispersion of the food and cover types which best suit the species you want to increase. Deer, quail and rabbits are three popular species which require a considerable amount of cleared land, food plantings and edge cover to reach their maximum abundance. Squirrels and turkeys, on the other hand, fare best in the more mature wooded sections where mast, fruits and berries are abundant.

Most military areas encompass abandoned farm land

First of 721 deer checked at Quantico last fall.

U. S. Marine Corps photo by Crawford





Commission photo by Kesteloo The Commission of Game and Inland Fisheries helps carry out habitat improvement work.

often including large cleared areas. However, these clearings quickly revert to brush, and then woods, if they are not maintained. The "brush-hog," a huge rotary mower, is one efficient and economic tool for controlling vegetation in old fields and clearings on military reservations. Another method that has been used successfully on A. P. Hill reservation in controlling brush in field areas is the leasing of suitable fields to nearby farmers for cultivation. In return for the use of this land, they carry out specified practices to provide food and cover for wildlife. This may involve planting special wildlife food and cover plants, or just leaving part of their crop as wildlife food.

Plantings of permanent grasses, forage plants and cover species in established clearings tend to slow down invasion by unwanted brush species. Hand clearing sometimes is necessary. Many old home sites on the Marine Corps' Quantico reservation have been cleaned up and improved by hand labor. Dense cover was broken up, food was planted, and fruit and mast trees were pruned for better yield.

Clearings and openings in the woods are created in several ways. One of the most efficient and practical methods is by controlled timber sales. Clear cutting can be used to produce agricultural-type clearings. Selective cutting can be employed to open up dense timber stands, releasing and stimulating the growth of deer browse and food-bearing shrub and tree species.

Military area management plans include bulldozed firebreaks at strategic intervals, but fire control is only one of the useful purposes they fulfill. They provide hunter access into wooded sections and increase the safety margin by improving visibility. They usually are planted, to prevent erosion and to provide additional game food. These

(Continued on page 20)

Stalk the Big Cats

T was hot and it hadn't rained for weeks. The dark rings around the cypress trees were clear indicators that Chickahominy Lake was more than a foot below its normal level. The heavy weed growth, most of which was usually submerged, had broken through the surface in many places giving off a foul, unpleasant odor. Every day was the duplicate of every yesterday—hot, dry and still.

Fishing on the "Chick" was at an all-time low during this summer of 1963. Pickerel had quit completely and bass, particularly big bass, were very, very seldom. Even the usually eager bream were off their feed. Things never had been slower.

The Chickahominy wasn't the only Virginia fishing water suffering a severe case of the doldrums. Every lake or pond in the entire area suffered the same fate. Only running streams such as the Nottoway and the upper James seemed to be spared this fate.

Lack of rain had curtailed the spring herring and shad runs and, later, had put the damper on nearly all fishing throughout the summer. Yet, I was convinced that there had to be some way to beat the heat and I was determined to find it.

On this blazing late July afternoon Captain Stan Kennedy of Fort Lee and this writer had nothing but empty stringers to show for more than eight hours of fishing. None of the usual hot spots had produced, and it looked as though we were going to have a difficult time trying to convince the home front that we had spent the day fishing. We had so many fishless days lately that even my little boy was growing skeptical.

Stan looked at me and said, with that "let's quit" look on his face, "Well, what do you think?"

"Let's try the deep water," said I, trying to work a little enthusiasm into my tone.

"I'm game as long as you are," answered Stan with a look of resignation on his face, "but where do you think the lake is the deepest?"

I knew that the deepest part of Chickahominy Lake was near the dam but this was very deep. I never had enough anchor rope aboard to find bottom. Besides, I had never found very deep water to be productive. For so-called deep water fishing I usually looked for a place which was somewhat deeper than the surrounding water but not much over 25 feet at the deepest. I suggested that we move around the lake with the boat and take soundings with the anchor.

We sounded the lake bottom for the better part of an hour before we found a place that was deeper than the surrounding area but not too deep for our anchors to reach bottom. Using live minnows on bottom lines, fished without corks, we set several lines.

By

MAJOR JACK RANDOLPH
Fort Lee

Photos by the author



If we weren't lucky we were consistent. An hour's fishing brought no strikes and we decided to move again. I suggested that we head inshore towards Cypress Banks and try to find where the deep water begins to slope upward to the shallows. We only had to move the boat a few yards before we hit the slope.

Anchoring again we set out several lines. Each line was cast in a different direction along the slope in an attempt to fish several depths and perchance locate the correct one.

Almost instantly I had a hit. The line moved off the spinning reel in short spurts, and after a proper waiting period, I set the hook into a fine two-pound bass. The long drought was broken!

Then Stan had a smashing strike. The line sizzled off his reel, and when he struck, his rod bent double and the drag shrieked in protest. The fish fought stubbornly but well beneath the surface. Slowly Stan gained line but as the fish approached the boat he sounded and slugged it out from the lake bottom.

It was a stalemate. The fish circled the boat but refused to give an inch. Finally, after his third orbit, Stan clamped down on the drag and with a do-or-die effort he raised the big fish, a heavy channel cat, to the surface where I could net him.

And the action continued! Three more husky catfish and two more bass were added to the string before we had to clear the premises to catch the last Hopewell Ferry. Our catfish ranged from 7 to 14 pounds each, while the bass were all of the same cut of the jib—two pounders.

Before quitting we marked our spot by triangulating on three points on the shore. We hoped that we had found the answer to this dry-weather fishing, and we had.

Trip after trip has found the slopes of the channel to be productive. The activity seems to be confined to no one spot on the lake. To some extent we have taken fish from every slope we've tried. Here at home I have eight trophy fish citations for channel cats ranging from 10 to better

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than 14 pounds to remind me of those Chickahominy slopes.

There's more to this method of fishing than just finding the slopes. Again, the slopes are those places where shallow water of from four to five feet shelves off to deeper waters, gradually deepening to about 15 or 20 feet. The boat should be anchored about halfway down the slope over about 10 feet of water.

Live minnows are the only bait that proved successful. Large roach minnows were normally best, but there were days when the honors went to medium-sized blackbacks.

Since the catfish run so large, the lines should test at least 12 pounds with 15-pound test lines preferred. Grindle and gar are often unwelcome catches. Their dental work is mean on leaders requiring the use of double strand 15-pound test snells on the 1/0 or 2/0 hooks.

Two basic rigs work nicely. Greyson Mitchell of Richmond likes to use a fish finder rig employing a sliding sinker. To make this rig, pull the line through the brass ring on a bass-type sinker and tie the end of the line to a barrel swivel sufficiently large so as not to pass through the ring on the sinker. Fasten the snell of the hook to the other end of the barrel swivel.

When using the fish finder, a fish may pick up the bait and run with it without pulling the sinker. Consequently, the fish neither feels the weight of the sinker nor does the sinker catch on weeds giving the fish sufficient leverage to steal the bait.

Since I often prefer to quickly change from bait fishing to plug casting I use a simple, but probably less efficient rig. I tie a small snap swivel to the end of the line and snap on both the sinker and the hook snell in the same snap.

A long snell on the hook works to good advantage. Primarily it provides the minnow with a longer "leash" and he can swim in a larger circle, perhaps being more easily found by a hungry fish.

You have to see it to believe it but nothing strikes harder than a channel cat. It is always a good idea to have the bail of the spinning reel in the open position or a conventional reel in the free spool position if you let your rod sit in the boat while awaiting a strike. If you don't open the bail, a channel cat strike will launch your rod, reel and all before you can even think about grabbing it. I've had cats hit so hard that my conventional free spool reel sounded like an outboard cranking up.

Minnows should be hooked through the back, in back of the dorsal fin. A minnow so hooked will struggle upwards, attracting more strikes. A minnow hooked through the mouth will lie on the bottom, eluding most prowling cats.

Many anglers frown upon catfish as a game fish but one encounter with a Chickahominy citation winner will make a believer out of the purest of the pure. But slope fishing is by no means strictly a cat fishin' proposition. Bass, pickerel, perch, grindle and gar will be well represented on the slopes. Often your bass and pickerel catch will eclipse your take of cats.

I never cease to chuckle when other anglers motor by. Nearly every time out someone passing by explains to his buddy we're freckle fishin' out there in the middle of the lake. More than once we've had to fight a big fish with the rod pointed straight out and a glum expression on our faces so as not to draw a crowd on a Saturday afternoon.

It's funny, but most bass fishermen look on a lake as a doughnut. A lot of good stuff on the edges with a hole in the middle. Nothing could be further from the truth. As many, if not more, bass dwell well out in the lake as live along the shore. The best bass I ever hooked on the "Chick" smacked a minnow on the slopes.

It was a weekday afternoon and my five-year-old son, Johnny, and I were working the slopes. The action was fast and furious. I landed a citation cat and hooked another that Johnny struggled with and finally, with a little help, boated. Johnny was living it up and enjoying himself a great deal. That is, until I hooked the third fish. At the strike I knew it was a heavy fish, probably another big cat. But then the surface exploded as a great bass leaped with flared gills, shaking his head violently in an effort to tear out the hook.

Johnny screamed, "Daddy, don't bring that fish into the boat!" Again and again the big bass leaped while Johnny kept pleading for me to not land that "mean" fish. Ten pounds if he went an ounce, and I was winning! Finally, the moment of truth. He was boatside and I reached for the net. A last flurry of action and then—the leader broke and Johnny was not unhappy.

Where are my favorite slopes? Well, I'll tell you, friend—they're just a half an anchor rope length from the bottom of the boat. All you need to find 'em is an anchor rope of your own.

Hefty mixed stringers of bass and catfish from the slopes of Chickahominy Lake. At right the author shows a proper rig for slope fishing.







HIDDEN HORDES

HIS is the time of the late-summer doldrums, of the dog days. The mid-day sun sears the land in a brassy haze. The woods, fields and marshes are silent. Leaves wilt and droop in the listless air. At no other time, save the sub-zero days of the northern winter, does the outdoor world seem so still.

The appearance is deceiving, says Dr. George Burger, Remington Arms Company, Inc., wildlife biologist. Hidden by the lush summer vegetation, the land throbs with life. Wildlife populations are at their annual peak, ranks swollen by young'uns hatched or born in earlier months. There's little hint of this abundance at mid-day. But venture afield at dawn and you enter a different world. The air pulses with bird song. Roadsides and woods edges are alive with cottontails, in a stepladder of sizes; with tidy, bright-eyed families of quail; with cautious does and stilt-legged fawns.

Here and there a hen quail, pheasant or grouse doggedly incubates a late clutch of eggs, her earlier efforts thwarted by weather or nest-robbing varmints. If she succeeds, hunters in the fall will call her late-hatched brood "squealers," and some will mistakenly give her credit for raising two broods

The waterfowl marshes are strangely quiet, even in early morning. Gone is the riot of sound and color of the spring courtship displays. The brilliant plumage of the drakes has disappeared, replaced—in a molt unique among all birds—with drab, henlike feathers. Most of the drakes themselves have vanished from the marshes, banding together on more open waters before this molt deprives them of all flight feathers.

While the drakes seek the safety of open water, the hens, also molting and flightless, remain close to cover with their broods. For some, the peace will be disturbed by crews of waterfowl biologists, taking advantage of the molting period to round up, count and band the earth-

Remington News Letter



Photo by Leonard Lee Rue III Roadsides and woods edges are alive with cottontails, in a stepladder of sizes.

bound birds.

By mid-morning the flood of life ebbs into the shade, for a long siesta through the heat of the day, to venture forth again with the lengthening shadows of late afternoon. Stuffing themselves on the abundance of late summer, the wild youngsters—all unconsciously—are racing against time.

All too soon the days will be much shorter; the hint of frost will be in the air. Young wings must be strong, and new feathers full, to carry those who will migrate beyond the reach of winter. The youngsters who remain—the earthbound mammals and the nonmigrant birds—must develop strong bodies, well fortified with reserves of fat.

Men throng the beaches, huddle in air-conditioned rooms, and cluster around fans. But in the dog days, the hidden hordes make ready for winter.

There is little activity in the heat of midday, but at dawn and dusk the hidden hordes of wild youngsters partake of the abundance of late summer as they race against time to build strong bodies and lay up reserves of fat.





Let me tell you about Game Wardens!

By OZZIE WORLEY Roanoke World-News

EXT time I hear somebody giving a Virginia game warden some guff, I'm going to dunk the guy in the water.

These guardians of wildlife and rights are the outdoorsman's friends. Not only that, they can lead you to a gold mine of fishing pleasure.

Where's the corpus delecti? Okay, you asked . . . I'll

From several sources my fishing partner, Harold Bennett, and I skimmed off the news that feeder streams to two new lakes, Smith Mountain and Leesville, were alive with bass.

A Roanoke high school boy caught a five-pound small-mouth bass in the Blackwater River, which flows through Franklin County and empties into the Smith Mountain impoundment.

The Blackwater thus presented interesting possibilities. After work one day, Bennett and I went exploring.

Along Route 40, five or six miles from Rocky Mount, we stopped at a service station to ask the quickest way to the Blackwater. We jotted down the suggested route ("Go left at Redwood"), but spent the best part of an hour making wrong turns. Two more stops for information, plus a feeling that "the river's gotta be somewhere around here," finally brought us to it.

We were to wade the river, and shucked our good clothes in the station wagon. "I always like to leave my wallet under the seat so it won't get wet," Bennett suggested. It sounded like a smart idea, so I poked mine there, too.

Dressed in our old khaki pants and tennis shoes, and with rods at the ready, we charged off to the banks of the Blackwater.

Bennett took the first hole; I went in above him.

"Hey, I got one!" he yelled after he'd unlimbered his first spinner.

"What kind?" I called.

"A game warden," he sang out.

His voice had barely died when the bushes snapped on the path leading to where I was stationed.

A green-clad warden blocked the path.

"Having any luck? May I see your license?" he asked in one breath.

I recognized Jerry Whittaker, who's assigned primarily to Smith Mountain and Leesville Lakes. He didn't remember me

I answered his questions: "No luck yet, and my license is in my wallet under the seat of the car."

I was a little uneasy. I should've kept my pocketbook, I mumbled to myself.

Then I remembered. "Hey, sir," I said to Whittaker, "don't you remember me? I met you last summer on Leesville Lake?"

Before he could answer, we were joined by my buddy,



Commission photo by Harrison

They guard the state's wildlife resources. They also can lead you to a gold mine of fishing pleasure.

Bennett, and the man who had come up on him. It was Franklin County Warden Gordon Preston and, thank goodness, he knew us.

"I know these fellows have licenses," he said to Whittaker. "I don't see any reason to make them go to the car now, do you?"

Whittaker agreed.

"But what are you fellows doing here when you could be fishing in the hottest spot in Virginia?" Preston broke in.

I told him about the Roanoke youngster and the five-pound bass he said he'd landed from the Blackwater.

"There should be some bass in here all right," Preston said. "We've been stocking this stream for the last four years."

He pointed to the supports left from a bridge which was taken out to make way for Smith Mountain Lake, which will back up into this stretch of the Blackwater. "We dropped some 16 inchers off there."

Preston explained the stocking was done to get a head start on the lake.

"But do you fellows really want to catch some bass?" he asked.

This was like asking a fish if it liked water. Our ears became elephant-sized. "Uh, huh," we said, half expecting to be biting on a joke we hadn't heard.

"Seriously," Preston went on, "you are just a few miles from the hottest fishing spot in Virginia right now."

Sensing we were weak on Franklin County direction-taking, he explained three times how we could get there:

"It's the Pigg River at Fralin's Ford. Get back on Route 40, turn off at Gladehill and it's the first bridge that you'll cross."

Preston and Whittaker had to hurry off. They were to patrol more of the Blackwater and other tributaries of the Smith Mountain and Leesville Lakes to assure that undersize bass weren't being caught.

(Continued on page 19)



Stepping into the garage, Barbara took a bottle of concentrated insecticide off the shelf and scanned the list of garden insects it would kill. Aphids were on the list. Treatment: mix one tablespoonful in a gallon of water and spray.

That was all Barbara wanted to know. She ran a gallon of water into the sprayer, carefully measured a spoonful of the poison into it, and then quickly dumped in two more spoonfuls. "I always triple the dose," she explained to a neighbor who had dropped in to see what was going on. "When I spray, I want to be sure it does the job."

Maybe no apparent harm resulted from Barbara's thoughtless misuse of the powerful insecticide. But it could have. The point is that she never realized the stuff could be harmful. Like thousands of careless people, Barbara hadn't bothered to read the label. If she had, she would have known that the material contained four powerful poisons: lindane, malathion, DDT, and another patented chlorinated hydrocarbon. Malathion alone would have accomplished the purpose, and the additional poisons only added unnecessarily to the hazard. The label also warned that this material was harmful if swallowed; that breathing spray mist should be avoided; and that malathion might be absorbed through the skin and cause muscular weakness.

It cautioned against use of the spray on humans or household pets, and pointed out that in case of contact, the skin should be washed immediately with soap and water. Eyes hit by the spray require flushing with water for 15 minutes and medical attention. In case of poisoning the user was urged to call a physician immediately. Atropine was listed as antidotal.

The label further warned against use of the spray on cucumbers; on foliage of white or sweet potatoes; on root crops or in soils, or on other crops grown in rotation with root crops, including peanuts. It stated that forage crops treated with the material should not be fed to dairy animals or animals being finished for slaughter and sale as beef.

Users were urged to keep the pesticide out of reach of children and domestic animals, and when the container was empty that it be washed thoroughly and destroyed.

Clearly, this was not a product to be casually handled or misused.

The spray Barbara used contained some of the better known pesticides which came out of laboratories as a result of research stimulated by World War II. One of the earliest and perhaps the best known was DDT, a chlorinated hydrocarbon.

A number of people have been genuinely concerned by articles which allege that insecticides are the cause of many human and animal diseases. If such concern leads us to be more careful and selective in the use of these chemical boons to mankind, then the authors have done the nation a real service.

Dr. Wayland J. Hayes, Jr., Public Health Service, U.S. Department of Health, Education, and Welfare, says: "During years of investigation, it has been impossible to confirm the allegation that insecticides, when *properly* used, are the cause of any disease either of man or animals."

"Properly" is the key word in Dr. Hayes' statement, because many pesticides are highly toxic, and have caused deaths when used improperly. Deaths from pesticides occur mostly among farmers, applicators, and other agricultural workers who come in close or accidental contact with the chemicals in lethal doses. The average citizen seldom is exposed directly to the more toxic agricultural materials.

There have been a number of ill-advised programs in which large areas have been sprayed indiscriminately, bringing death to fish, birds, and other wildlife. In fact, almost everyone agrees that even the best and safest chemical pesticides fall far short of the *ideal* for controlling insects and other pests selectively.

"Biological controls," without the use of chemicals, is an alternative often suggested. On the whole, results have been somewhat disappointing. U.S. agricultural experts scour the world for predatory insects and diseases that kill pests. Some, like the house sparrow, first introduced in Brooklyn in 1851 to combat insect pests, have themselves become pests and destroyers of crops. The starling, introduced in New York in 1890, not only has become a pest in cities where enormous flocks roost on buildings and trees, but has caused serious decreases in native hole-nesting birds by usurping every available nesting site.

Many modern pesticides are highly poisonous and persistent. If you must use them, do so with extreme care. Use only as directed, and in the minimum quantities and concentrations recommended.

Among the newer methods which do look hopeful are anti-insect bacteria, sterilization of male screw worm flies, and sex attractants to draw insects to lethal baits.

Both the chemical and non-chemical methods in use today to control pests are the result of research by thousands of scientists in state and federal agencies, in industry, in our universities, and in private institutes. Collectively, these scientists now are aware of both strengths and weaknesses in the methods in use, and are striving to develop new and better methods of control. Beyond a doubt these improvements will be made. But, until they become available we must rely on more careful use of our present agricultural chemicals if we are to continue to be the best-fed and healthiest nation on the globe.

Shun Barbara's casual attitude toward the use of pesticides; use only approved insecticides on foods; do not store pesticides in cabinets or on shelves with foods and medicines; buy pesticides only in small quantities; buy material labeled for a specific pest problem; keep pesticides locked away from children and pets; keep such material away from livestock and pet foods; remove clothing immediately if it becomes contaminated; and destroy empty containers.

And before you use any pesticide, read that label and use it exactly according to the directions.

SUMMER—full Virginia summer—has curved its bright bowl of blue over the softly rounded hills. Clouds are banked like flocks of fresh-washed lambs. The Hazel River bends in its horseshoe course below us, with the water swiftly moving and dark in the channels. Crows make black notes of music as they wing across the sky.

The green grass of the lawn of our country home resembles a patchwork quilt as our guests for the day, city guests, sprawl lazily on its soft but scratchy cushion. There are many chairs and hammocks but our friends sink to the ground as though pulled by an irresistible force. A few toddlers, on unsteady legs, tumble and bounce and rise again. They seem controlled, like toys, by a magnet that draws them to the earth against their will.

We talk lazily of man's affinity to nature and of how there seems to be a lodestone deep within the mother-earth that pulls at her children no matter their age or culture. Someone remembered the myth of Antaeus, the son of Earth and Sea. He was a gigantic wrestler whose strength was invincible so long as he touched the earth. If he was thrown he arose with renewed strength from his contact with the earth.

Later, perhaps because of the talk, we noticed that nearly



By KATHERINE W. MOSELEY Arlington

every one of our guests wandered off through the day to tramp about in the deep woods. Some climbed the highest knoll and watched the play of sunlight on the blue mountains and some sat quietly on the Fishing Rock in the river. They came back to the house rested—hungry.

Just what is the latent, primitive streak in civilized man that compels him into closer communion with raw nature? Perhaps it is only an unconscious desire to escape the complexities of everyday living. There comes a time in every life when there is an instinctive search for the raw and fundamental. There are moments when the clumsy and primitive stir the heart rather than the finished and slick. This fact surely explains why hundreds of thousands of families pack up and take to the wilderness from the first open day of spring until snow flies.

There is no age limit. Retired couples pitch tents and start hiking. Young couples, often with a baby strapped papoose-style to a parent's back, make camp from their car trailer. Small children are as numerous and buzz as busily as bees about the picnic table.

These people do not go because it is an easy vacation, nor a cheap one, nor a way to get away from it all, but rather because it is a way to get back to it all; to learn again the sweetness of fresh water from the earth, hot sand on bare feet, and the healing sun on pale bodies. They are testing themselves in a hard, exacting manner as they relearn the essential facts of existence and the deep sense of oneness with the land. They are drawing strength from the earth.

The enormity of the mountains, the immensity of the sea, the loveliness of the arching sky, the clean breath of the westerly wind bring an indescribable sense of peace. The mind expands in new awareness to the color and sound and fragrance. Even weariness in the wilderness lacks the toxic poison of city-tension and bone-tired fatigue. Hard physical exertion may torture unused muscles and fret flabby flesh but rest is good, followed by relief and relaxation.

Why does the rhythmic thunder of the surf stir us? Why do we feel a tender kinship with the cottontail rabbit that bounds from the tangled hedge laced with wild honey-suckle into his intricate tunnel woven through the briers and thorns? How can the unceasing music of the frogs soothe and why should the whip-poor-will's evensong seem a lullaby? It is because they are primitive with basic appeal and a part of our heritage.

The cities have spread. Industrialization, urbanization and suburbanization have sharpened the need to discover the awe and grandeur of the great forests, fields, rivers and



mountains that remain untouched by man's bumbling hands. We go to these places in our beautiful state to untangle jangled nerves and to slow down from the frantic pace that is unnatural and unhealthy.

There we will find stately ancient trees, older than any living man, to make welcome umbrellas of shade. The air is different, not just cooler, but sweeter and quieter. Birds carol in a chorus of unbearable beauty from tall hemlocks and pines. Squirrels chatter and scold with guileless naivete. Concrete-tired feet ache to be cooled in rippling mountain streams. There is a sermon in every rotting log and a poem in each lichen covered rock. Whether it be a mountain top wrapped in mist or the panoramic view of the country-side or beside the pounding sea, peace and serenity of mind can be found.

There are few sanctuaries so meaningful to the human soul as a piece of lonely land that it can call its own. Possession may be only for an hour or a day or a weekend, but it is a place where the searching one is able to again touch earth and live.

VIRGINIA WILDLIFE

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HUNTING LICENSE PLATE SUGGESTION AIRED BEFORE COMMISSION. A suggestion that Virginia adopt some form of hunting license plate to be prominently displayed by hunters while afield was presented to the Commission of Game and Inland Fisheries at their recent meeting in Richmond by a joint group from the Virginia Wildlife Federation and the Virginia Division of the Izaak Walton League.

- The proponents stressed easy identification of problem individuals in the field as the main advantage of the system. They cited cases of property abuse and trespass and even threatened violence, in which a prominent form of identification, such as the proposed license number, might have given the mistreated individuals opportunity for legal recourse. In addition to the opportunity for punishing offenders, the advocates of the system feel that the mental conditioning of the sportsmen might have a restraining influence on many of their inconsiderate acts.
- After hearing the delegation, the Commission voted to study the matter in detail including contacts with other states to determine effectiveness and drawbacks of the system, plus added costs and accounting procedures to issue a number with each license.
- \$12,000 APPROVED FOR WILDLIFE RESEARCH. The Commission of Game and Inland Fisheries has approved an allocation of \$12,000 to finance work being carried out by the Virginia Cooperative Wildlife Research Unit at VPI. This is the same amount approved for the four-agency cooperative unit last year to finance wildlife investigation conducted by candidates for advanced degrees. The Wildlife Unit is supported jointly by Virginia Polytechnic Institute, the U. S. Fish and Wildlife Service, the Wildlife Management Institute, and the Game Commission.
- Studies just concluded by unit students include investigation of the effects of hunting on cottontails, the optimum size plot for taking deer browse samples, and the incidence of brainworms in deer from seven Southwest Virginia counties.
- Other research projects planned or already begun by unit workers include marking animals by means of radio transmitters, aging deer by annual rings in the teeth, causes of shock disease in squirrels, the effects of pesticides on farm ponds, analysis of forest wildlife clearings, the effects of fire on game bird foods in the Piedmont, and a survey of hunter expenditures in Virginia.
- COMMISSION PURCHASES ADDITIONAL WATERFOWL HUNT AREA AT BACK BAY. The Commission of Game and Inland Fisheries recently purchased a 500 acre tract in the Back Bay area formerly known as Trojan Club Marsh for development as a public waterfowl shooting area. The newly acquired marsh tract will supplement facilities at the 800 acre Pocahontas Marsh Area purchased last fall. The two will be operated together as a public waterfowl hunting area this fall.
- As authorized by the 1964 General Assembly, the Commission will make a daily charge of \$3for hunting on the combined areas. This fee will help defray the cost of blinds, boats and other equipment necessary for this type of managed hunting.
- Current plans call for the operation of at least five blinds on the Pocahontas area as a package deal including guide and shooting rig. Hunters will be assessed a guide fee in addition to the \$3 daily blind fee and the Commission will arrange for guides, boats and decoys for those who reserve blinds on this basis.
- On the Trojan Marsh Area the Commission plans to maintain 6 point blinds and 7 water blinds. Only the \$3 daily shooting fee will be assessed on this area, which will be operated for hunters who have their own shooting rigs or wish to arrange for their own guide.
- The Commission anticipates that the demand for these shooting facilities will be greater than they can accommodate so a drawing system for allocation of blinds and shooting days is contemplated. Details of this system will be announced late this summer after the waterfowl season dates have been set.

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A-HUNTING WE WILL GO!

By HARRY L. GILLAM Information Officer

VARIED and liberal hunting slate awaits Old Dominion nimrods this fall. The most profound changes will affect those who hunt Virginia counties west of the Blue Ridge where a two-week deer season, a two-week early small game season, and pistol hunting will be among the more pronounced variances from last year's hunting format.

The two-week western deer season will be a new experience for hunters in that section and may tend to spread out some of the intense hunting pressure which has been descending upon that area for the previous one-week shooting spree. When western counties were first opened up for hunting after deer had been re-established by the Commission, the season was gradually lengthened year by year from one day to a full week. Since that time doe shooting has been reduced to one day, leaving the remainder of the hunt week open for bucks only.

The Commission felt that additional buck shooting days were justified in this section to increase hunting opportunity and distribute pressure since the removal of a generous number of bucks does not affect the productivity of a deer herd. Either-sex shooting will be limited to the first day only.

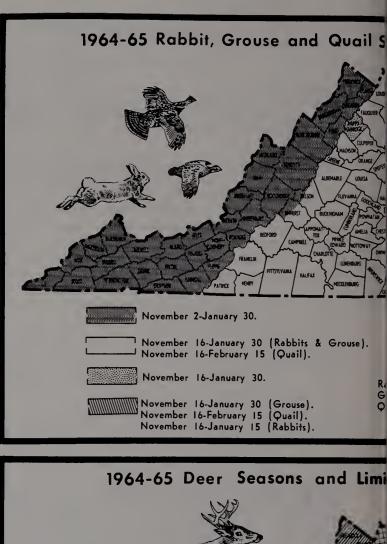
The two-week early small game season beginning November 2 and extending through January 30 will give west of the Blue Ridge hunters a crack at small game early in the fall to compensate for some of the hunting days invariably lost to bad weather later in the winter. Since turkey populations in the west are generally in good shape, hunters in this area will be able to hunt the big birds during the early small game season, and on until December 15.

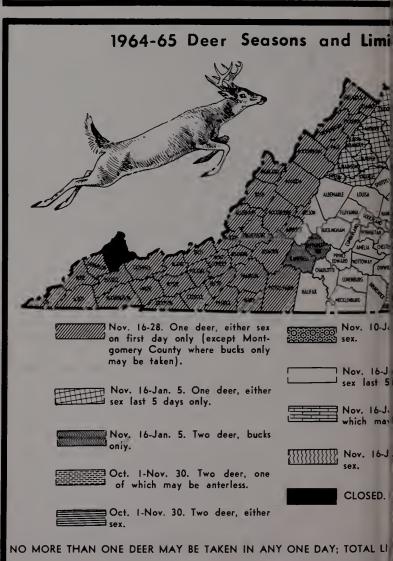
Hunting game animals with pistols, legal this fall for the first time, will provide a new experience for pistol devotees in west of the Blue Ridge counties. Pistols or revolvers must be .23 caliber or larger and develop at least 350 foot pounds of muzzle energy as rated by the manufacturer. This means that not all large caliber pistols will qualify nor will all ammunition. All game birds and animals may be hunted with pistols during regular seasons in this section except migratory game birds which may be hunted with shotguns only as provided by federal statute. Any existing prohibitions or restrictions on the use of rifles will apply equally to pistols.

Pistols of any caliber may again be used during daylight hours for killing undesirable birds and animals statewide except over inland waters.

Hunters in eastern Virginia counties will have four different bag limits to keep track of instead of the two in effect in this section last year. Northern counties will have their usual 1 deer per license year bag limit but does may

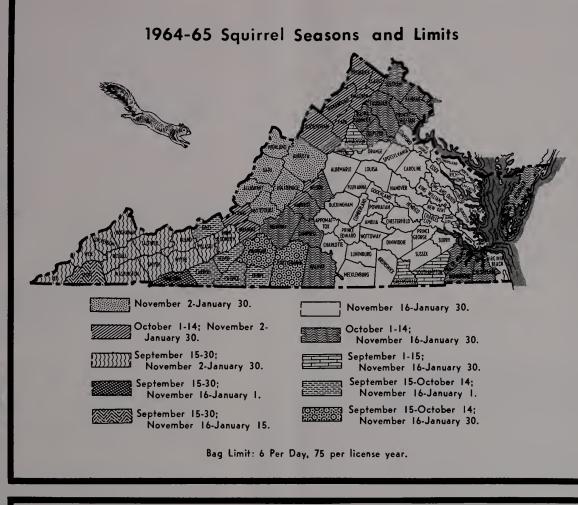
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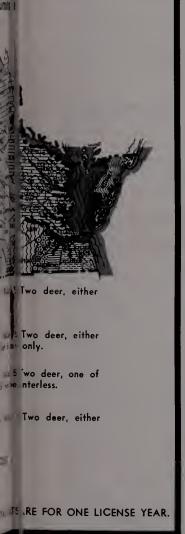


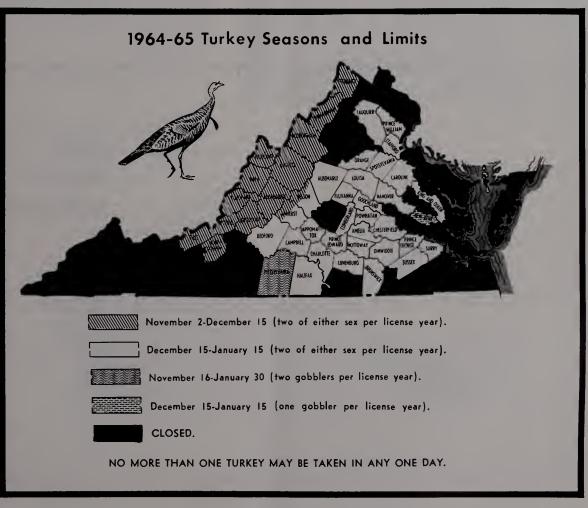




6 per day; 75 per license year. 3 per day; 15 per license year. per day; 125 per license year.







be taken only during the last 5 hunting days. Most Piedmont counties will have a 2 deer per license year limit, with the provision that either sex may be hunted only during the last 5 days. Northern Tidewater counties plus Greensville County and Chesapeake and Virginia Beach cities were granted the same bag in effect last year, which was 2 deer per license year, one of which may be antlerless. Isle of Wight, Nansemond, Southampton, Surry and Sussex counties were given a limit of 2 either-sex deer for the license year. Deer damage has been increasing in this section and the liberal limit should reduce deer numbers somewhat in problem areas.

The small game season in eastern Virginia was cut back to January 30 on all species except quail. Rabbits and squirrels have been on the verge of the spring nesting season by the time past seasons closed on February 15, and some hunters and landowners have objected to the long hunting period. Quail season, however, will remain open until February 15 in all eastern counties except Rappahannock

The short turkey season in eastern counties was unaltered from last year. The December 15-January 15 period was effective in holding down the turkey kill in this section where brood stock is at a low ebb. Poor nesting success in this area has caused a steady decline in turkey numbers for several years. Good reproduction in 1964 could start turkey flocks in this section on an upward trend, but heavy shooting would counteract any potential increase.

Bear seasons and limits remain unchanged except for the inclusion of the Poor Mountain Area in Roanoke County in the early western bear season set by Legislative Act from November 2 through January 5. Last year's bear kill of 381 set a new record.

Dinwiddie and Lancaster Counties joined those probibiting hunting with rifles larger than .22 caliber. Cumberland County's high-powered rifle prohibition was modified to allow these weapons to be used for taking crows and woodchucks during the general closed hunting season. Slugs were prohibited in Richmond and Westmoreland Counties.

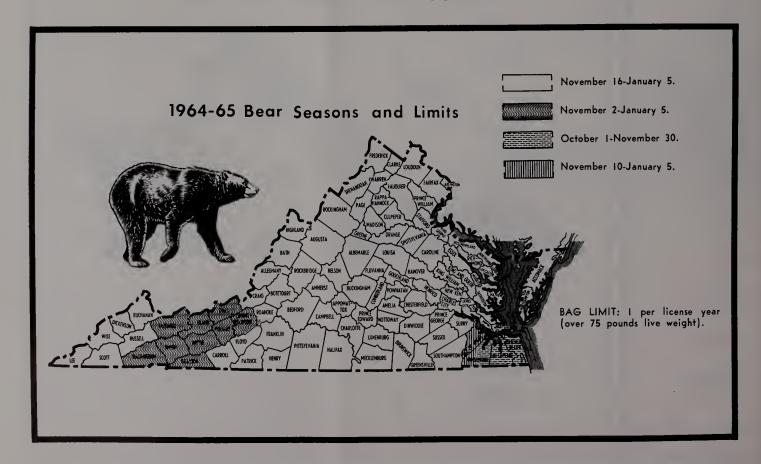
The East-West Blue Ridge dividing line has been modified to follow U.S. Route 29 through Amherst County and Route 151 through Nelson County for all seasons except fox. Thus, the western half of these counties will follow west of the Blue Ridge seasons and the eastern half will be governed by the seasons and limits prescribed for eastern counties.

A special season for shooting sika deer has been scheduled for October 5-10 on the Chincoteague National Wildlife Refuge. Only shotguns and bow and arrow will be permitted. The bag limit was set at 1 a day, 2 of either sex per license year, the animals taken to count as all or part of the hunters' annual limit. Details of hunt application procedures, quotas and special restrictions will be available at a later date.

Some 45 eastern counties and cities plus eastern Amherst and Nelson Counties were opened up for year around coon hunting. The October 1 through March 10 season was retained in a number of northern and southern Piedmont counties.

Residency requirements for legal residents purchasing resident licenses have been lowered to two months provided a special affidavit is properly filled out. The special form is available from license agents throughout the state and has provision for a statement that the applicant is truly a domiciliary resident subject to Virginia taxes and other obligations prescribed by law.

Residents 70 or over have been exempted from hunting license requirements when hunting on private lands in their county of residence. This exemption will also apply to big game licenses under these conditions.





Eleventh in the series of articles on some of the favorite angling hot spots in Virginia.

RICH RIVANNA

By BOB GOOCH *Troy*

IKE casting for bronzed smallmouth bass, fly fishing for plump sunfish, bow hunting for carp, jump shooting for ducks? The Rivanna River offers all of these possibilities plus sucker fishing, catfish, pickerel, gar and an occasional largemouth bass or crappie. And if you can get the seasons to coincide, squirrels and doves can add variety and heft to a slim limit of ducks.

And this bonanza of hunting and fishing is found in a short river that begins and ends within the boundaries of two Piedmont Virginia counties. It forms in the Blue Ridge foothills of Albemarle and merges with the James River at Columbia in Fluvanna.

The North and South Forks of the Rivanna join a few miles north of Charlottesville and when compared to the majority of Piedmont "creeks, branches and runs," the river becomes a fair sized stream. Quickly gaining volume it slips quietly through the outskirts of bustling Charlottesville, flows respectfully by Thomas Jefferson's Monticello Mountain and rushes on to Fluvanna.

Secondary Road 729 crosses the river at Milton on the eastern edge of Albemarle and is a good access point for an all day float trip to Crofton, the upstream Commission owned boat landing in Fluvanna. The problem at Milton is that there is no public access to the river, so permission must be obtained to launch a boat.

Highway bridge 600 spans the stream at Crofton and this is the best point from which to start a float trip. The Commission of Game and Inland Fisheries owns land here and has constructed an excellent boat ramp and automobile parking area.

Next stop downstream is the Commission owned access point and boat landing at Palmyra, the county seat of Fluvanna. U.S. Highway 15 crosses the river at this point, but access to the water is off Primary Highway 53 about fifty yards west of its junction with U.S. 15.

From Palmyra the Rivanna winds a meandering course to Columbia, with Secondary Road 615 crossing it just east

of Carysbrook and Primary 6 bridging it a short distance west of Columbia and its junction with the James. Permission is needed to enter the stream at either 615 or from the highway bridge at 6. From Palmyra to 615 a float trip will take an easy half day, but from Palmyra to Columbia you will need a long summer day with plenty of daylight—assuming you want to fish as well as float.

For the stranger to the Rivanna River country, the best bet for an outing is the float from Crofton to Palmyra. Crofton can be reached from U.S. 15 by taking 631 west at Hunters Lodge, turning left on 633 and following it to 600 which crosses the river. Routes 631 and 633 are hard surfaced roads and 600 is an all weather gravel road. From U.S. 250 the access point can be reached by turning south on 600 at Beaverdam Baptist Church and following it to the bridge.

The normal river current will take you to Palmyra in five to six hours, but to enjoy the trip and the fishing a full day should be allowed.

For the fisherman the Rivanna is primarily a small-mouth stream. The river no doubt gets a boost from its status as a tributary of the James, a well known bass stream. Fish in excess of three to four pounds are rare in



Commission photo by Kesteloo A tributary of the James, the Rivanna is primarily a smallmouth stream.

the Rivanna. My personal record is a three pounder that pounced on a surface lure a short distance upstream from Crofton on a golden day in October several years ago. Though Rivanna smallmouths may be short on size they do not lack in other qualities.

Bass are moody fish and do not always cooperate. When this happens, switch to panfish and you will not want for action. The river is loaded with plump and plucky redbreast sunfish and any small lure will take them. And a good thing about sunfish is that they are river mates of the smallmouth and most lures that will take sunfish will also take bass. So while you are doing battle with the sunfish the bronzebacks may come to life and tie into your lure. That's your cue to change your tactics to bass.

Most tributaries of the Rivanna River are good pickerel streams, so don't be surprised when you tangle with old chainsides. However, I do not consider the river a first class pickerel stream and do not fish it if I am primarily interested in *Esox niger*.

Many farm pond outlets feed into the Rivanna and are the source of an occasional largemouth, bluegill or crappie, but these fish, like the pickerel, are a bonus to the small-

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Fishing Holes (Continued from previous page)

mouth and sunfish fare.

The clean, usually clear, Piedmont streams that feed the Rivanna are a story in themselves. Suffice it here to note that they offer grab-bag type fishing—a wide variety of warm water species. In Albemarle, in addition to the North and South Forks, there's Buck Island Creek, an excellent pickerel stream. And in Fluvanna McChunk, Ballinger and Cunningham Creeks offer pickerel, largemouth bass, suckers, bluegills, sunfish and an occasional smallmouth. Pickerel are usually the most steady performers in these tributary streams, but the angler can expect a strike from just about any species native to or introduced to the Piedmont region.

Wood ducks, mallards, black ducks and other river ducks use the Rivanna all the way to Charlottesville and during good waterfowl years the winding river is ideal for jump shooting from a canoe or other type light craft. Since much of the river flows through heavily wooded areas, picking up a limit of squirrels is easy and a lot of fun. I have for some time been attempting to squeeze in a combination duck, dove and squirrel trip, but about the only time the seasons coincide is during the second half of the split dove season and by then the river is usually frozen over.



Silhouetted against the western sky, a wild turkey presents a brief but thrilling spectacle before winging into the sunset.

Commission photo by Kesteloo

A Rivanna River memory I treasure is another day in October and a float trip that produced some exciting bass fishing. My party floated from Milton to Crofton that day. It was Indian summer and the hills which crowd the river were aflame in autumn glory. We quickly strung all the sunfish we could use and concentrated on the bass. Rounding a bend in the river we flushed a large flock of ducks that stayed with us for several miles—maintaining a safe distance by moving ahead of us as we drifted downstream. Finally after being flushed several times, they turned and flew back up the river, passing over our heads to the tune of whistling wings. Drifting over a shallow flat we spotted a large turtle, partially buried in the mud. Somewhat apprehensively, we managed to hoist him into the boat and kill him—as dead as you can kill a turtle!

And as we approached Crofton in the gathering darkness near the end of the trip, we spotted a wild turkey perched in the almost leafless branches of a tall sycamore. Silhouetted against the western skyline, he presented a brief but thrilling spectacle before becoming alarmed and taking off—winging into the fading sunset.

Just Around the Corner

By SFC. LEO A. AUBREY Fort Lee

REMEMBER the old story about the man who traveled all over the world looking for happiness but didn't find it until he got home again? Have you ever stopped to think that we sometimes do the same thing when it comes to fishing?

A few weeks ago four of us planned a trip to one of the better fishing spots in Virginia. We got up in the middle of the night (it's a long drive) to be there and on the water at sunrise. We fished all day, and must have traveled twenty miles on this particular body of water trying to get fish. Our final score was one small pickerel, one small bass, four yellow perch and one bowfin. None of us was too familiar with the place. Perhaps that is why we did so poorly.

A few days later when I had an afternoon off, I called up one of the party who had been on the trip, and asked him if he would like to go fishing.

"Where are you planning on going?" he asked. "We can only fish for a few hours before it gets dark."

"I'll pick you up," I replied, "and we'll be fishing in fifteen minutes."

Where did I take him? To one of my favorite fishing spots. It's a ten minute walk from downtown Petersburg—the Appomattox River, specifically the stretch between the Appomattox Bridge and the Power Dam. My friend looked at me rather skeptically when we arrived, but his skepticism changed after he had landed six good sized channel catfish. I didn't do badly myself that afternoon, landing a five pound catfish on a fly rod plus an assortment of bluegills, rock bass and one large white sucker.

This river is pretty heavily fished in the springtime when the shad and white perch are running, but very lightly fished the remainder of the year. I've fished this stretch of water many an afternoon without meeting another fisherman. I like to fish here with a fly rod, using worms for bait. I use the fly rod primarily because it affords more sport. The panfishes, such as bluegills, yellow perch and white perch, put up a fine fight on a light fly rod, and when I happen to hook onto a good-sized channel catfish, I really have my hands full.

There is one place on this stretch of the Appomattox that is named (and very aptly, I must say) Catfish Alley, where the river is very swift and deep. When I fish this section I use a seven foot leader of six pound test, and a number 6, long-shanked hook. I put on five or six red worms, being careful not to hook them more than twice. I cast slightly upstream and toward the middle of the river, letting the current carry the bait downstream.

This little "fishing hole" just outside Petersburg is not unique, but it does illustrate a point. If you will look at a map of Virginia, you will see that no matter where your place of residence may be, a short ride or maybe only a short walk will take you to some likely fishing water. Don't depend on the long weekend trip to take you where you can enjoy your favorite sport. Look around you. Good fishing may be nearer than you think. It may be just around the corner.

Let Me Tell You About Game Wardens (Continued from page 9)



Warden Jerry Whittaker, who usually works Smith Mountain and Leesville Lakes during fishing season.

Under regulations passed this spring by the Virginia Commission of Game and Inland Fisheries, ALL bass caught in the Roanoke River drainage area must be 12 inches long to be "keepers."

"If you like to fish for fun," Preston said in parting, "and if you are pretty good fishermen, you'll have a field day on the Pigg."

l've never met such an accommodating man. "l'll be over there after a while," he promised, "and show you where to fish. And I'll have a look at those licenses when I get over there, too." With that, he and Whittaker drove away.

I've never fished the Pigg, mainly because it looks sluggish and unproductive. But that was before the Leesville Lake filled. The Pigg is one of the main feeders to this impoundment.

Last year, Preston had said, bass, predominantly largemouths, poured up the river in the spring, stayed for the summer, and went back into the lake in the winter.

Bennett and I apparently had stumbled upon the mother lode. We spun the station wagon's wheels and departed the Blackwater in a wave of dust.

We had no trouble finding the place on the Pigg that Warden Preston told us about. In 15 minutes, we had crossed the bridge at Fralin's Ford, parked the wagon and were hot-footing it through the bushes to the edge of the river.

A half dozen bait fishermen were above the bridge and we went below it. The other fellows were catching small bass. Bennett and I went to work with Shysters, spinners, Flatfish and plastic worms. The water was milky, almost muddy, and we wondered about our chances. Could the bass see the lures in the dark water?

Our worries were for naught. On the second or third cast, Bennett had a nine-inch largemouth flopping from his spinner. I soon had one on a white Shyster.

We waded up to our waists. The bass were thick. The best places were along ledges and behind rocks in the slow-moving stream.

Bennett broke his string of largemouth catches by hauling in a wall-eyed pike about 18 inches long. I reeled in my first smallmouth and a sunfish.

Warden Preston soon joined us on the bank. He was a cheerleader and adviser. "If it was clear," he said, "you'd see them milling around."

Bennett remained within sight of the bridge where we began and I waded downstream. Once I inadvertently dropped a spinner into the water at my feet. A largemouth lunged at it, giving me a start.

The best hole I fished was bordered by a dead tree and a rock. I hooked seven largemouths and one smallmouth in this one. Two of the largemouths were within the 12-inch keeper range, but I freed them just as I had the others.

This is no stream for people who like to take fish home to mama. Only one out of a dozen comes close to the legal size.

At dusk, I climbed up a bank out of the river and stumbled through briers toward the bridge where we'd started. Bennett was already there.

"I lost count after landing 25," he said. I stopped counting early, too.

Although Bennett could've kept his walleye, it went back into the river, also.

The action was faster and much more pleasant than opening day of the trout season, and most of the credit goes to two thoughtful game wardens. As I said at the start, next time somebody shoots off his mouth about wardens, I'm going to . . .

Warden Gordon Preston checks bass taken from the Pigg River. A minimum size limit of 12 inches has been placed on bass in all waters of the Roanoke River watershed, following a three year controlled experiment at Front Royal which showed that such a limit increased not only the size of fish that enter the creel but also the total weight of fish produced by a body of water.



Wildlife Management on Virginia Military Areas (Continued from page 5)

long, lane-type clearings are more desirable than larger rectangular shaped areas. The long narrow format increases the edge effect, and makes food plantings accessible to game birds and animals occupying a large area of adjoining woodland. Power line, pipeline and railroad rights-of-way, and tank trails, are ideally suited for this type of development.

Controlled burning as a tool for removing excess vegeta-



U. S. Marine Corps photo Fine fishing streams, such as this trout stream at Quantico, flow through some reservations.

tion is coming into wider acceptance and usage. When confined to small areas, it can be employed with little or no danger to pine and larger hardwoods. It not only is an aid in game management, but protects against uncontrolled fires as well.

Food plantings fall into two main categories: grasses and succulent plants, mostly for rabbits and deer; and seed bearing plants, mostly for quail. Fescue, rye, ladino clover and orchard grass are among those plants best suited for providing green food. They are readily eaten by deer and rabbits and provide food throughout the winter months. They are semi-permanent requiring little attention for several years after planting. They form a dense ground cover and inhibit the growth of brush species. The low mainte-



Commission photo by Kesteloo Impoundments, such as this one at Camp Pickett, offer great potential for fishing opportunities on military areas.

nance costs allow the use of available funds over a much greater acreage.

The Game Commission's annual game bird mixture, developed after years of testing, is used extensively on military reservations for annual seed production. Large quantities are strip planted each year on areas suited for small game production.

Plantings of shrub lespedeza have been made too. Although food production per acre does not equal that achieved with the game bird mix, the shrubs are perennial in nature and do not have to be replanted each year. The lower planting and maintenance costs allow the development of considerably greater acreage than would be possible with annuals on the same budget.

Small impoundments offer a great potential for increasing fishing opportunity on military areas. There are over 2,000 acres of impounded water on the 12 military areas now managed under cooperative agreement. Fishery biologists have worked with local authorities to see that many of these acres are managed for maximum game and pan fish production. The recreational value of these waters, and the fine streams that flow through some reservations, is a tremendous asset that we cannot afford to waste.

Law enforcement has never been a serious problem on

Law enforcement has never been a problem on Virginia's military areas. State game wardens, assisted by military personnel, see that sportsmen abide by state regulations and do not stray from authorized hunting and fishing areas.

U. S. Marine Corps photo hy Kloczkowski





most of the areas. Military officials have been extremely cooperative in providing extra enforcement personnel when needed. Just dealing with the masses of people who do use, and would like to use, some of these areas has been much more of a problem than law enforcement.

Our three largest areas, Camp Pickett, A. P. Hill, and Quantico, provided 30,519 hunter days of recreation during the 1963-64 season. The deer kill on these three areas was 1,972 and on the 10 areas which offer big game hunt-



Commission photo by Kesteloo Clearings maintained on military reservations to provide diversified terrain for troop training also provide diversified habitat for wildlife.

ing, it must have exceeded 3,000 or nearly 10% of the statewide kill.

Hunter pressure has been increasing rapidly in eastern Virginia. but it is most acutely felt on our public areas. Our reduced either-sex deer shooting in eastern Virginia next fall should ease the pressure on deer herds at Camp Pickett and A. P. Hill, where some reduction in the kill is needed.

On the other end of the scale are those military areas where training schedules and security requirements limit the amount of hunting that can be permitted. Since hunting on these areas is limited, game harvests have been low. To help ease an over-population problem, a special two deer, either sex, bag limit for the coming season has been

established for Quantico, Camp Peary, Cheatham Annex, Fort Eustis, Naval Weapons Station and Langley Air Force Base, while elsewhere in most eastern counties antlerless deer hunting will be more restricted.

Virginia's military areas are among the state's most productive game lands, both in terms of game harvested and recreation provided. Their recreation value to the sportsmen of Virginia, both military and civilian, is tremendous. Many effective game management techniques fit in almost perfectly with primary missions and land use objectives of these installations. There are few conflicts of interest, and those that occur are readily resolved. Special hunting regulations for these areas are perfectly feasible



Commission photo by Kesteloo Wildlife food plantings help prevent invasion by unwanted plant species and thus slow down reversion of cleared areas to brush and woods.

whenever they are needed either to increase or restrict the harvest of the game crop. In fact, it is easier to exercise precise control over the kill on most military areas than on any other category of private or public land except a payas-you-go shooting preserve. With shrewd management, under our harmonious cooperative relationship with the military authorities, the recreational value of hunting and fishing on Virginia military areas seems destined to continue to grow as the years go by.

Power lines, fire breaks and tank trails on military reservations are ideally suited for wildlife habitat development projects.

Commission photos by Kesteloo







Bird of the Month

Kingfisher

By J. J. MURRAY
Lexington

HE kingfisher is a paradox among our birds. A land bird, it takes in our part of the country all its food from the water. A striking bird in appearance, it nests out of sight, deep in a hole in the earth. Contrary to the almost universal rule among birds that where the sexes differ in plumage the male is brighter, the female kingfisher is more showy than her mate. She is almost human in this.

The scientific name of this bird, usually listed in the bird books as the belted kingfisher, is Megaceryle alcyon. Both parts of the name are from the Greek, and both mean "king of the fishers," the first part of the first name adding the term "great." Halcyone was the daughter of Aeolus, god of the winds. When after the death of her beloved husband she threw herself into the sea, she was transformed into this bird which was given her name. "Halcyon" days, thus, are the days of calm which she brings.

Every boy knows the kingfisher, very distinctive in its form, nearly always perching in the open. The head and bill are very large for the size of the body, the head having a flaring crest, as if the hair needed brushing. The bill is long, heavy, and sharp-pointed for catching and holding fish. The head and back are grayish-blue, with many tiny white spots. There is a white collar. Except for a blue band across the upper breast, the under parts of the male are white. In addition to the blue band across the upper breast the female also has a reddish band across the lower breast and along the sides.

The kingfisher is a noisy bird. In old days each city had a night watchman who as he made his rounds carried a wooden apparatus that made a loud rattle. This is the way a kingfisher sounds as he makes his way along a creek. Particularly does he sound off when he chases his lady friend.

In late March the kingfishers pair off. By mid-April the digging of the nest hole begins. For 40 years to my knowledge and probably long before this they have nested in the river bank below our Rockbridge County cabin on the Maury River. They dig a hole in the sandy bank about four inches in diameter and reaching back for five or six feet or more. Here is another need for this powerful bill. The tunnel runs in horizontally, usually straight but detouring a bit when there are obstructions. At the end a lining for the nest is made of leaves and grass, fish bones and scales.

Six or eight, but sometimes as few as five or as many as a dozen eggs are laid in this retreat. In about two and a half weeks the eggs hatch into ungainly youngsters. Here in the darkness these young develop. As dropped bits of fish decay what a smell must develop in this dungeon!

The nests are occasionally flooded, especially on a swift stream like the Maury where the water piles up easily. This has happened to our nest, making the birds late in raising their young. Sometimes the holes are right over the water, so the young have to be able to fly for some distance as soon as they venture out of their home.



Edited by HARRY GILLAM

Lower Mississippi Fish Kills Prompt New Look at Pesticides Problem

Periodic massive fish kills on the lower Mississippi River, estimated by Louisiana officials to have totaled nearly 10 million fish in that state alone since 1960, have triggered a new round of pesticide hearings in Washington. The kills of millions of fish from St. Louis to the gulf have generally baffled the experts, but recent tests show that many of the dead fish contain concentrations of pesticides in excess of the accepted lethal limits. Shrimp as well as fish have reportedly been affected.

At least two distinct hypotheses as to the cause of these apparently lethal chemical concentrations in this section have been advanced. One is that by virtue of its tremendous drainage area the Mississippi picks up a large dose of these chemicals which accumulate to lethal proportions in the lower river. Another is that the intensive use of chemical sprays on cotton and sugar cane crops in this southern section is sufficient to provide the large accumulations.

In either case, the alarming fact is that no accidental or unusual circumstances preceded the destruction of aquatic life. Apparently, the use of these chemicals in normal concentrations applied by standard procedures can bring about such disasters, in certain locations. Reports are that even drinking water may contain concentrations of these chemicals approaching the levels of human tolerance in parts of this area. Reports of pesticide residues in animals from the high seas intimate that pesticide contamination may soon become an international issue.

Bay Eagles Need "Family Planning" Counsel from Alaskan Relatives

A study of 151 occupied bald eagle nests on Alaska's Kodiak National Wildlife Refuge revealed an average production of 1.1 eaglets per nest during the 1963 season. A similar study of Chesapeake Bay eagles revealed a production of about .1 eaglet per nest. Production figures from the year before in the bay area were only slightly better. averaging .17 eaglets per nest. Experts have been concerned for several years over this extremely poor reproduction in the Chesapeake section.

"SLOW" Group Formed



Jim Rutherfoord, left, free-lance outdoor writer and outdoor editor of the Radford News Journal, and Harry Gillam, Information Officer for the Virginia Commission of Game and Inland Fisheries, confer on the shores of Fontana Lake during a recent meeting to organize a Southern Lakes Outdoor Writers group. The newly formed regional group is to be a subsidiary of the Outdoor Writers Association of America. It was felt that the sub-organization could promote better exchange of information and ideas between writers in the southeastern states. The visiting writers were guests of the Fontana Village Resort, a complete "resort city" high in the Smokies.

Tidewater Lunkers



U. S. Navy Photo, N.S.C. Norfolk, Va. Cheatham Annex Conservation Ranger "Buck" Rogers, left, helps R. F. D. Flaherty of Norfolk hold up a string of lunker bass taken in Jones Pond on the Military Reservation. The string is topped by a 7 pound 8 ounce largemouth which won angler Flaherty a Virginia Wildlife Trophy Fish Citation.

Hunting Minor Factor in Determining Rabbit Numbers

A study recently completed by Neil F. Payne of the Virginia Cooperative Wildlife Research Unit pretty well disproves the idea that rabbit numbers can be permanently reduced by intensive gunning. On test plots located on the Hog Island Waterfowl Refuge in Surry County where the study was conducted, the removal of up to 75 per cent of the rabbits had no effect on the number available the following fall.

In areas with dense cover it was impossible to remove 75 per cent of the existing rabbits by combined trapping and hunting. These plots contained the highest rabbit populations. On sparsely vegetated plots, removal of 75 per cent of the rabbits was extremely difficult. so hunters would have no doubt given up long before such intensive harvest was achieved.

Rabbit populations were estimated by trapping and tagging individuals, then trapping again to get the ratio of tagged to untagged animals. All plots, including both the control plots where no rabbits were removed and those on which 75 per cent of the rabbits were removed, had substantially higher rabbit populations the following fall.

Estimates of normal rabbit harvest by hunters in other states range around 20-36 per cent and the difficulty encountered in removing greater percentages in this study indicates that this is probably a normal rate of removal in most Virginia areas.

Death Ray for Water Plants

The possibility of using ultrasonic vibrations to kill noxious water weeds is being studied in Nebraska as part of a federal fishery project. The optimum intensity and frequency required to kill troublesome species will be determined and a field ultrasonic generator developed if laboratory studies indicate that it will work. Similar units are now used by industry to "scrub" delicate parts suspended in solvent by means of ultrasonic vibrations.

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Edited by DOROTHY ALLEN

National Conservation Award

The Blue Ridge Council of Boy Scouts of Roanoke has been awarded the United States Department of Agriculture Secretary's Special Gold Seal Conservation Award. Officers of the Council are President, Thomas T. Moore; Scout Executive, James W. Mayer; and Assistant Scout Executive, Monroe D. Gizzard.

The council has a 16,000-acre reservation where they are operating a planned program of development. They have hired a qualified forestry graduate to be their Land Management Supervisor. His duties include selective cutting, harvesting, tree planting, and building fire trails as they are needed on the reservation.

Their Conservation Plan was developed in 1960 and in 1963 was finalized into a Conservation and Land Management Committee. To date the council has completed the following projects: terraced and seeded areas around the lakes at both Camp Powhatan and Camp Ottari on the Blue Ridge Scout Reservation; taken corrective measures for erosion at both lakes; planted wildlife cover and wildlife food at both camps; removed underbrush in many areas; begun construction of at least 20 miles of fire trails on the reservation; stocked the lakes with several thousand trout, the Scouts assisting in the stocking; completed rotation of campsites for conservation control; retired five campsites and started conservation practice right away; built five new campsites with room for rotation; built a new chapel at each camp, and terraced and seeded the grounds around each; built a new outdoor theater, at Camp Powhatan.

The Scouts have also carried out terracing and seeding along stream banks. Over 10 check dams were put in. Seven nature trails have been established; specimens were identified and labeled along all trails.

Some of the many special conservation activities carried on in the districts were the following: built and in-

Fishing Jamboree-Camporee

More than 100 area Boy Scouts had a real "ball" in mid-May at the Saltville Works of Olin Mathieson Chemical Corporation when the plant played host at a fishing jamboree-camporee.

Smyth County scouts and their leaders began arriving on Friday afternoon, May 15, and set up camp in a field adjacent to the community golf course and within a stone's throw of a large pond which had been stocked the day before with nearly 1,000 trout.

At 10:00 a.m. Saturday, the Scouts began a merry part of their weekend when they started hauling the lively trout out of the pond to the accompaniment of cries of "I've caught eight!"; "This one is at least 15 inches long!"; "Where's my bait?"; "Aw, shucks, he got away!" and all the other happy comments you'd expect from youngsters exposed to a fisherman's heaven.

After lunch, the Scouts were back with the trout and four hours later had landed nearly 300 fish, all of which they ravenously consumed Saturday evening.

Following the fishing part of the Saturday program, the entire group boarded a specially outfitted flatcar for a railroad tour of Olin Mathieson's plant where they got an over-all view of Olin's facilities for manufacture of soda ash, caustic soda, chlorine, dry ice, bicarbonate of soda, and hydrazine, a rocket fuel for the Titan II missile.

A couple of hours in camp and they then trekked to the Saltville Elementary School cafeteria where Mrs. Oaklea Blackwell and her helpers had prepared a delicious trout supper. Elementary School Principal Charles Patterson showed a film about the James River and, if a few heads nodded, and even if a few fellows dozed, it was agreed by all present that it was a fitting end to a thoroughly enjoyable day.

On Sunday morning, the Rev. C. E. Wilson, pastor of Madam Russell Memorial Methodist Church, presented a brief worship service, after which some of the troops headed for home and some Scouts went back to the fishing hole to try their luck at getting some trout for Dad and Mom.

The fishing jamboree was a brainchild of Woodrow Newman, game warden for Smyth County, ably assisted by T. J. Crickenberger, scout executive for the Blue Ridge Council.

Olin Works Manager R. C. Aebersold, Operations Manager J. C. Rivenbark, Industrial Relations Manager H. E. Diggs, and Yardmaster R. B. Comer were instrumental in making the project a rousing success, with a demand from the youngsters that the same idea be carried out in 1965.

The Saltville Rescue Squad and the Saltville Volunteer Fire Department were on hand to provide protection in case of emergency, but the Scouts demonstrated their efficiency in controlling their campfires and not a single person fell in the pond, though some wanted to dive in after "the big one that got away!"

—Henry E. Diggs Olin Industries

stalled bird houses and feeders; visited fish hatcheries; set out over 200,000 seedlings; cleared over 2 miles of the Appalachian Trail; transplanted deer, turkey, and beaver to new areas; trained Explorer and Senior Scouts in fire fighting and actually helped fight several fires and assisted the Forest Service in developing camping facilities in Federal Parks and in several public camping areas.



Scouts demonstrate the damage caused by erosion.

JAMBOREE - CAMPOREE



James Hutton of Chilhowie waits patiently for his first nibble.



Troop 193 of Marion arranged an attractive enrrance to their camp. Scouts in the front row are left to right: Richard Mercer, Jr., Jerry Perry, Roger Anderson, Robert McCloud, Roy Parks and Steven Sheets. Scout leaders in the background are T. J. Crickenberger, II, district scout executive for the Blue Ridge Council, Richard Mercer, Sr., and C. H. Gallimore.



In spite of the maze of poles and lines, there were few tangles and all such mishaps were handled good-naturedly. Curtis Surber, right, of Saltville's Troop 165, has just hooked a trout and is intently working his catch to shore.



Smyth County Game Warden Wood-row Newman stands with a group of proud Scouts. Left to right are Roger Talbert and Mason Taylor of Mc-Cready's Gap, Steve Berry of Chil-howie and Danny Ashley of Glade Spring.



Holt is scoutmaster of Chilhowie Troop 95.



R. C. Aebersold, works manager of Olin's Saltville Operations, poses with Roger Talbert and Mason Taylor of McCready's Gap, Steve Berry of Chilhowie and Danny Ashley of Glade Spring.



special flatcar took Scouts and their leaders on a tour of Olin's plant. Rescue Squad members ac-companied the group.



Boy Scouts of America, Blue Ridge Council Photos



Willard McCready, CO₂ Shipping Supervisor at Saltville's Olin Opera-tions and a member of the Saltville Rescue Squad, was on hand with a boat and safety gear in case of any accidents. (There were none, fortunately.)

AUGUST, 1964



Edited by JIM KERRICK

Good Judgment and Power Boating

Literally thousands of persons will take to the waterways this year with little or no instruction in safe power-boating even though excellent courses in powerboat handling are available. For those who are unable to attend a safe boating class, textbooks and periodicals covering all levels of complexity are available.

The following advice is directed to the novice. It is simply an effort to apply common sense to the use of horsepower on the water.

Gasoline is used by most powerboats and is intended to explode in the cylinders of the engine, not in the bilge. The only cure for an explosion is prevention. Each boater should keep the tanks, fuel lines, carburetors, etc., in good repair and above all exercise extreme caution when refueling.

Life preservers should be U.S. Coast Guard approved and in good condition at all times. All preservers should be checked periodically for flotation. While underway, non-swimmers should be required to wear a lifesaving device and in any event approved life preservers should be readily accessible at all times.

If a passenger falls overboard you cannot always depend on his grabbing a rope and you probably should not try to maneuver close to him due to the prop hazard. You could go upwind, idle your motor in neutral, and drift to him, but this takes time.

Now imagine the same situation wherein the person overboard is a non-swimmer and without a life jacket. If you, as the skipper, think you could easily go overboard after the non-swimmer, just consider the drift of your boat and the length of time a swimmer without a life jacket can support a non-swimmer.

When a person in the water is struck by a propeller, death or serious injury invariably results. Always maintain a sharp lookout for swimmers. Know and stay clear of the skin diver's flag. Never permit passengers to ride on the bow of your boat. Do not clown around by following water skiers. Remember a turning prop can draw a swimmer to it.

If you should get stuck on a sand bar, shut off your motor before trying to push the boat free. Never push a boat while the motor is running.

Never overload your boat. Know and observe the maximum recommended load and horsepower ratings. Your load includes weight of the motor, fuel, gear as well as that of the passengers.

Some people are going to drink while operating their boats. If you are one of these, please remember the responsibility you have to your passengers. They probably credit you with more knowledge of boat handling than you actually possess. Intoxicants dull your common sense, and may prove how tragically misplaced your passengers' confidence can be.

—C. L. Hoovler, Jr. Edgewater, Maryland

Law Enforcement Corner

During the period July 1, 1963, through April 30, 1964, 28,607 pleasure boats were inspected by Virginia game wardens in accordance with the Virginia Boating Safety Act, to promote safety for persons and property in use, operation and equipment of vessels.

Lack of approved lifesaving devices or fire extinguishers was the most frequent violation, resulting in 552 convictions

No registration number, improper displaying of number, operating on an expired temporary certificate of number, and wrong color contrast were second with 169 convictions. Such miscellaneous offenses as skiing without a life preserver while having no observer in the boat in addition to the operator, and displaying of improper lights or running with no lights during the hours of sunset to sunrise, were third with 64 convictions. Careless and reckless operation, and operating a boat while under the influence carried 18 convictions.

One out of every 53 inspections revealed a violation concerning lifesaving equipment. The requirement for having at least one approved lifesaving device for each person on board is not only a state law but also a federal law and is enforced throughout the United States.

Use Floating Key Chain

A small fishing bobber attached to a boat ignition key will keep the key afloat if it should happen to be dropped in the water. It's also a good idea, say the Evinrude Motors people, to record the serial number on the key so that replacement keys can be obtained from the manufacturer if the originals are lost.

Condition of Boat Bottom Important

A speed loss of over 50 per cent can occur when a boat is left in the water for as little as 30 days and marine growth is allowed to accumulate on the hull. In a series of tests, Evinrude engineers found that marine growth builds up faster on boats left in salt water, but that boats moored in fresh water are also affected. To insure top performance, they recommend boats be removed from the water and thoroughly cleaned at least once every three weeks.

Bike Lock Stops Outboard Thieves

A regular bicycle lock can be effectively used to discourage outboard motor theft. To attach the lock, tighten the stern bracket clamp screw handles until they point downward. Then pass the lock through the holes provided in both handles. The motor cannot be removed from the boat without first disturbing the lock.



Photo courtesy Evinrude Motors

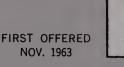








SET NUMBER











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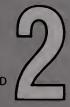
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RUFFED GROUSE

















Make your check or money order payable to the **Treasurer of Virginia** and send it with your order to the Commission of Game and Inland Fisheries, Box 1642, Richmond, Virginia 23213. Please do not send cash through the mail. (**Be sure to specify the set you want by number—number 1 or number 2**)





Light gray to dark olive. Young may have few to many black specks. Older fish often lose these specks. Anal fin with 25 to 30 rays. Maxim m size 35 lbs.



Dusky gray to light slate no spots on body. Snout rounded. Anal fin with 19 to 22 rays. Maximum size: 6 lbs.

FORKED-TAILED CATFISH



Black to yellow-olive; barbels dark. Anal fin with 17 to 19 rays. Tail square.



Light olive to yellow; chin barbels white to cream. Anal fin with 24 to 27 rays.



Sides mottled olive or brown. Chin bar-bels dark. Anal fin with 20 to 24 rays.



Head flat; body somewhat flattened. Sides lightly mottled. Anal fin with 15 to 20 rays.

CATFISH WITHOUT DEEPLY FORKED TAILS

